

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

CANCEL CLAIMS 1-9

10. (New) A process for preparing and/or setting air and steam-permeable structural members containing a mixture of thermoplastic binder and fibers, optionally with additional foam in the form of flakes and/or granules, said process comprising the steps of:

(a) positioning a structural member between shaping surfaces in a pressure resistant chamber of a mold having upper tool and lower tool portions;

(b) deaerating the chamber by applying a vacuum;

(c) pressurizing said vacuum chamber with a vaporous heat-transfer medium;

and

(d) applying a vacuum to said chamber to evaporate the condensed heat-transfer medium.

11. (New) The process according to claim 10, wherein the heat transfer per unit mass of the structural member between the vaporous heat-transfer medium and the pressure resistant chamber is lower than $250 \text{ m}^2/\text{s}^2$ per 1 m^2 of surface of the structural member and per 1 K of heating the structural member.

12. (New) The process according to claim 10, wherein the structural member has at least two layers.

13. (New) The process according to claim 12 wherein said layers are of different materials.

14. (New) The process according to claim 10 wherein said shaping surfaces are perforated metal sheets spaced apart from said pressure resistant chamber thereby defining a steam channeling space.

15. (New) The process according to claim 14 wherein said metal sheets are disposed at a distance of from about 2 to about 20 mm from said pressure resistant chamber.

16. (New) The process according to claim 10 wherein the shaping surfaces comprise a layer of material having a low thermal conductivity.

17. (New) The process according to claim 16 wherein said sheets have a layer thickness of from about 1 to about 30 mm.

18. (New) The process according to claim 16 wherein said layer of material is selected from the group consisting essentially of PTFE, EPDM, epoxy resin or phenolic resin.

19. (New) The process according to claim 10 wherein said upper and lower mold tools include contoured blocks which form the mold base.

20. (New) The process according to claim 19 wherein said contoured blocks are formed from a material selected from the group consisting essentially of aluminum steel, cast iron or cast aluminum.

21. (New) The process according to claim 19 wherein said mold bases are heated to a temperature to between about 120° to 180 °C.

22. (New) A process for preparing and/or setting air and steam-permeable structural members containing a mixture of thermoplastic binder and fibers, optionally

with additional foam in the form of flakes and/or granules, said process comprising the steps of:

- (a) positioning a structural member between shaping surfaces in a pressure resistant chamber of a mold having upper tool and lower tool portions;
- (b) deaerating the chamber by applying a vacuum within a range of from 0.5 to 0.01 bar absolute;
- (c) pressurizing said vacuum chamber with a vaporous heat-transfer medium within a pressure range of from 2 to 10 bar absolute; and
- (d) applying a vacuum to said chamber to evaporate the condensed heat-transfer medium within a range of from 0.5 to 0.1 bar absolute.

23. (New) The process according to claim 22, wherein the structural member has at least two layers.

24. (New) The process according to claim 23 wherein at least two of said layers are of different materials.

25 (New) The process according to claim 21 wherein said shaping surfaces are perforated metal sheets spaced apart from said pressure resistant chamber thereby defining a steam channeling space, said sheets being disposed at a distance of from about 2 to about 20 mm from said pressure resistant chamber.

26. (New) The process according to claim 21 wherein the shaping surfaces comprise a layer of material having a low thermal conductivity, said sheets applied to the mold chamber in a layer thickness of from about 1 to about 30 mm.

27. (New) The process according to claim 21 wherein said upper and lower mold tools include contoured blocks which form mold bases.

28. (New) The process according to claim 27 wherein said contoured blocks are formed from a material selected from the group consisting essentially of aluminum, steel, cast iron or cast aluminum.

29. (New) The process according to claim 27 wherein said mold bases are heated to a temperature to between about 120° to 180 °C.